Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. A process for compressing [CP] input digital video signals (VN) and for decompressing [DP] compressed binary signals (SIC, SIC1) resulting from such a compression, said input digital video signals (VN) having at least a luminance component and being formed by a succession of corresponding frames, each frame representing a video picture and formed by a succession of pixels,

[I] wherein the ~~whereas this~~ compression process [CP] includes ~~consists in~~ looking for the displacements and the sudden modifications in the different corresponding pixels, between two successive frames of the input digital video signals ~~to be encoded~~, and ~~consisting in~~ deducting from the said displacements and from the said sudden modifications, a flow of binary encoded an encoded signals (VP) which comprises:[[,]] for the initial sequence and for each following sequence of the digital video signals (VN) beginning with a modification in the video picture ~~represented by the said digital video signals, in~~ of a given frame with respect to the previous frame[[,]]:

-on the one hand, at the beginning of a sequence, or ~~as well as~~ for the pixels suddenly modified in value, at least the [[said]] frame or the [[said]] pixels of the [[said]] digital signals to be encoded, without encoding ~~any modification~~, and

-on the other hand, throughout the sequence up to the beginning of the following sequence, a succession of correction bit packets,

said compression process [CP] including:

[A] - a preliminary encoding operation of the [[said]] input digital video signals (VN) using a wavelet analysis process, favoring the transmission of the contours of the successive pictures represented by the [[said]] signals, in order to obtain a succession of mosaic encoded digital signals (VM) forming ~~encoding the said signals in the form of~~ a succession of picture mosaics,

[B] - an encoding operation for producing a flow of binary signals (VP) from the succession of mosaic encoded digital signals (VM),

[C] - a final compression operation of the flow of binary signals (VP) in order to produce compressed binary signals (SIC, SIC1) so as to reduce the number of the binary signals, ~~by suppression of the majority of the binary signals of the said flow whose value is determined within both possible values of such signals, and~~

[II] wherein the ~~whereas this~~ decompression process [DP] includes ~~consists in~~ decompressing digital signals composed of the compressed binary signals (SIC1) ~~resulting from the said compression process, i.e. comprising for each sequence at least a first digital signals frame, not modified by the said compression Process, followed by a succession of correction bit packets,~~

said decompression process [DP] including:

[D] - [[a]]an initial decompression operation of the [[said]] compressed binary signals (SIC1) which reconstructs (VP1) the [[said]] flow of binary signals ~~before suppression~~ (VP), which was compressed in the said final compression operation, ~~of the majority of binary signals of determined value,~~

[E] - a decoding operation of the [[said]] flow of binary signals (VP1) producing a succession of mosaic encoded digital signals (VM1),

[F] - a final decoding operation producing, ~~reconstructing,~~ from a succession of picture mosaic encoded digital [[type]] signals (VM1), a digital video ~~signals~~ signal (VN1) formed by a succession of frames, each made of a succession of pixels,

~~characterized in that~~ wherein

[I] as regards the compression process [CP] ~~is concerned~~, the encoding operation is applied ~~it comprises, moreover,~~ at least to ~~as regards~~ the luminance component~~, an additional encoding operation, applied to~~ of the succession of picture mosaic encoded digital signals (VM)~~resulting from the preliminary encoding operation, which~~ and is sensitive to the displacements of the contours in the [[said]] successive pictures frames and ~~which consists~~ includes, for each pixel of a frame, ~~said additional encoding operation using:~~

a) a deduction from the [[said]] succession of mosaic encoded digital signals (VM) of the correction bit packets as packets of binary signals representative of a global modification or not of the pictures between successive frames and of a displacement or of a non displacement of the pixel between the successive frames ~~frame involved and the previous frames~~, as well as in case of displacement of the amplitude and of the oriented direction of the displacement, ~~if any,~~ said deduction being done by subjecting the [[said]] mosaic encoded digital signals (VM), one frame at a time:

- to a time-related process, in which for each pixel of a given frame, the value of the [[said]] frame pixel is compared with its previous frame pixel ~~correct~~ value~~:~~ of same position, smoothed using a ~~«time constant»~~ time constant which is caused to evolve over the course of time to maximise the smoothing, in order to determine two parameters significant of the time variation of the pixel value between the frames, parameters which are variable over the course of time and are represented by two digital signals, which are [[i.e.]] a first binary signal ~~DP~~ (DP signal), having a first value of which represents a threshold overrun determined by the [[said]] variation and a second value that represents the non-overrun of this threshold determined by the [[said]] variation, and a second digital signal ~~CO~~ (CO signals), with a limited number of bits, representing the instant value~~, for the said pixel,~~ of the [[said]] time constant, for the pixel,

- to a space related process of the values, for each pixel of a given frame, ~~of~~ or said both digital signals ~~DP~~ (DP signals) and ~~CO~~ (CO signals) to determine the moving pixels for which simultaneously the [[said]] first signal ~~DP~~ (DP signals) exhibits the [[said]] first value representing the overrun of the [[said]] threshold and the [[said]] second signal (CO signals) varies significantly between neighboring pixels,

- to a process for deducting, for the [[said]] determined moving pixels, the amplitude and the oriented direction of the displacement,

b) a restoration of the position of the pixel if it has been displaced,

c) a check whether the position restored pixel in case of displacement is in compliance or in non-compliance with the corresponding pixel of the frame involved,

d) a memorisation of the result of this check, and

e) a transfer for the final compression operation~~,~~ either, of the correction bits packets ~~said packet of binary signals representative~~ in case of compliance, or of ~~the~~ picture mosaic encoded signals type (VH) from the [[said]] preliminary encoding operation (A) ~~wavelet filter~~ in case of non-compliance; and

[II] as regards the decompression process [DP] ~~is concerned, it comprises, moreover, a preliminary decoding operation, which~~ the decoding operation [E] is applied to the [[said]] reconstructed flow of ~~decompressed~~ binary signals (VP1), and [[which]],

a) causes initially to circulate over a loop, from an input position on this loop, signals of ~~the said~~ a flow of the mosaic type corresponding to a first frame of a sequence of the video signals ~~to be reconstructed and~~ resulting from the [[said]] decompression operation [D], wherein ~~whereas~~ the travel duration of the [[said]] signals over the [[said]] loop is equal to that of a frame of the video signals to be decoded ~~reconstructed~~, each signals of a frame circulating normally in the loop as long as no modification and no displacement is signaled in the decompressed binary signals (VP1),

b) repositions in the [[said]] loop, the pixels having undergone a displacement signaled by a group of digital signals representing, in the flow of decompressed binary signals (VP1), the amplitude and the oriented direction of the displacement, ~~also resulting from the said decompression operation,~~

c) replaces the picture mosaic type signals in circulation over the [[said]] loop with the new signals of this type as they arrive, and

d) extracts for transmission (VM1) to the final decoding operation~~,~~ [F] from an output position on this loop located downstream of the said input position, the Picture mosaic type signals circulating in the loop~~, after possible repositioning of the pixels~~.

2. (Currently Amended) A process according to claim 1, ~~characterised in that~~ wherein it uses,

[I] for the compression [CP]:~~and decompression processes,~~

- the preliminary encoding operation [A] of the succession of the digital video signals (VN) into a succession of mosaic encoded digital signals (VM) corresponding to the

scanning, in each frame, of [[the]] a Mallat diagram and making up the picture mosaic, using a wavelet filter,

- the final compression operation [C], using a compression-decompression assembly, with an adaptive quantifier, RCL type encoder and CH encoder, Huffman encoder type, operating in compression, and

[II] for decompression processes [DP]:

- the initial decompression operation [D], using a compression-decompression assembly, with an adaptive quantifier, RCL type encoder and CH encoder, Huffman encoder type, operating in decompression,

- the final decoding operation [F], using a reverse operation wavelet filter.

3. (Currently Amended) A process according to claim 1, wherein ~~characterised in that~~ the [[said]]preliminary decoding operation causes the [[said]] signals to circulate over a loop

with a travel duration equal to the duration of a frame of [[this]] the signals, causes the [[said]] signals, during [[its]] travel over the [[said]] loop, to pass through a pixel position matrix the number of whose rows, on the one hand, and the number of whose columns, on the other,

is at least equal to 2n+1, wherein ~~while designating by~~ *n* is the number of levels quantifying the displacement amplitude, whereby the [[said]] signals are [[is]] injected into the [[said]] loop at a central position of the [[said]] matrix, in bringing back, after running the [[said]] first frame of each sequence, within the [[said]] central position, a pixel of the [[said]] signals, while moving inside the [[said]] matrix, which has moved between the frame involved and the previous frame, in relation to the correction bits packet regarding the [[said]] pixel. ~~In order thus to restore the successive frames of the sequences as they were before encoding in the encoding operation, and extracts from the said loop, in a position located downstream, in the running direction, of the said central position, the successive frames thus restored.~~

4. (Currently Amended) A process according to claim 1, wherein ~~characterised in that~~ the [[said]] packet of correction digital signals comprises for each pixel, four groups of signals wherein:

– the first group includes a ~~consists of a~~ single binary signal having a first value that ~~signals whereby one of both possible values of which~~ represents a global modification of the pictures between a frame and the previous frame or a second ~~and the other~~ value that represents a global non-modification, said first signal group [[one]] signalling the necessity of global correction or the non-necessity of such a correction,

– the second group includes ~~consists of~~ a single binary having a first value that ~~signals whereby one of both possible values of which~~ represents a displacement for the pixel and a second ~~the other~~ value that represents a non-displacement, ~~said second one~~, and[[,]]

– the third and fourth groups each include a ~~both other two consist of~~ digital signal having ~~signals with~~ a limited number of bits and represent, one the quantified amplitude and the other the quantified oriented direction of the displacement ~~if any~~.

5. (Currently Amended) A process according to claim 4, wherein ~~characterised in that~~ the additional encoding operation [B] comprises the steps of:

a) encoding the [[said]] mosaic encoded digital signals (VM), one pixel at a time, in relation to the value variation of each pixel between the frame processed and the previous frames by implementing for each pixel, a block of four digital signals among which

- the first one, which is a binary signal ~~signals~~ represents, by both its possible values, either the necessity of global correction or the non-necessity of such a correction,

- the second one, which [[who]] is [[also]] a binary signal ~~signals,~~ appears exclusively when the [[said]] first ~~signals~~ represents the non-necessity of global correction and wherein the second digital signal ~~it then~~ represents, by both its possible values, either a displacement or a non displacement, and

- the other two, which are both digital signals with a limited number of bits, appear exclusively when the [[said]] first signal ~~signals~~ represents the non-necessity of correction

and wherein the other two ~~they then~~ represent, one the quantified amplitude and the other the quantified oriented direction of the displacement in a zone of the composite frame involved;

b) determining ~~determine~~ whether the proportion, in each successive frame, of the number of pixels for which the [[said]] first binary signal ~~signals~~ has a [[the]] value representative of a correction necessity with respect to the total number of pixels in the frame, exceeds a determined percentage; and

c) transmitting, one frame after the other, to the [[said]] final compression operation [C]:

- if the [[said]] percentage is not exceeded, the [[said]] block of signals related to the pixel affected, and

- if the said percentage is exceeded, the mosaic encoded digital signals generated by the preliminary encoding operation [A].

6. (Currently Amended) A process according to claim 1, wherein ~~characterised in that~~ the [[said]] preliminary decoding operation uses in the said loop a square matrix whose odd number of lines and whose number of columns are respectively smaller than the number of lines and the number of columns of a frame of the video signals to be reconstructed, wherein ~~whereas~~ both these numbers are greater, at least by one unit, than the number of quantification levels of the [[said]] displacement amplitude, and through which circulate the signals from the [[said]] decompression operation, and the position of the pixels having been displaced is restored, wherein ~~whereas~~ they are subject in the [[said]] matrix to a reverse direction translation whose quantified amplitude and whose quantified oriented direction are specified by the digital values of said both other groups of signals.

7. (Currently Amended) A device having a compression component for compressing [CP] an input digital video ~~signals~~ signal (VN) having at least a luminance component and formed by a succession of corresponding frames, each frame representing a video picture and formed by a succession of pixels, and a decompression component ~~as well as~~ for decompressing [DP] compressed binary signals ~~in a device of this type, operating in compression~~,

~~whereas this~~said compression [CP] component including:~~and decompression device comprises for the compression:~~

[A] - at least one preliminary encoding wavelet filter ~~(11)~~ configured to perform a wavelet analysis of the [[said]] digital video signals (VN) ~~performing a wavelet analysis~~, favoring the transmission of the contours of the successive pictures represented by the [[said]] signals, in order to obtain a succession of mosaic encoded digital signals (VM) encoding the [[said]] signals in the form of a succession of picture mosaics,

[B] - an encoding assembly for producing a flow of binary signals (VP) from the succession of mosaic encoded digital signals (VM),

[C] - a final compression assembly ~~(13/CP)~~ for compressing the flow of binary signals (VP) in order to reduce a [[the]] number of the binary signals ~~by suppression of the majority of the binary signals of the said flow whose value is determined within both possible values of such signals, and~~ for producing compressed binary signals (SIC, SIC1)

[II] ~~whereas this compression and~~ said decompression [DP] component ~~device~~ including:~~comprises for the decompression:~~

[D] - an initial decompression assembly ~~(13/DP)~~ for decompressing the [[said]] compressed binary signals (SIC1) which reconstructs the ~~said~~ flow of binary signals (VP1) which were compressed ~~before suppression,~~ in the said final compression assembly [C], ~~of the majority of binary signals of determined value,~~

[E] - a decoding assembly for producing a succession of mosaic encoded digital signals (VM1),

[F] - a final decoding assembly composed of a reverse-operating wavelet filter, which deduces~~reconstructs~~, from wavelets representing in the form of picture mosaics, a digital video ~~signals~~ signal (VN1), ~~the said digital video signals,~~

whereincharacterised in that

[I] ~~for~~as regards the compression component [CP], ~~it comprises, moreover,~~ and for at least ~~as regards~~ the luminance component in the [[said]] input digital video ~~signals~~ signal (VN), ~~an additional~~ the encoding assembly [B], ~~whose~~ input ~~(20)~~ is connected (VM) to the output ~~(16)~~ of the said wavelet filter (11/CP) [A] and ~~whose~~ its output ~~(24)~~ is connected (VP) to

the input ~~(25)~~ of the [[said]] final compression assembly ~~(13/CP)~~ [C], wherein the final compression ~~whereas this~~ assembly is sensitive to the displacements of the contours in the [[said]] successive pictures frames represented by the [[said]] succession of mosaic encoded digital signals (VM) ~~with mosaic pictures received at the input and comprising~~ and comprises, in order to process each pixel of a frame[[,]]:

a) means ~~(21)~~ to deduct from the [[said]] succession of mosaic encoded digital signals (VM) with ~~picture mosaics,~~ a packet of binary signals representative of a displacement or of a non displacement of the pixel between the frame involved and the previous frame~~frames~~, as well as in case of displacement of the amplitude and of the oriented direction of the displacement, ~~if any,~~ said means including~~being~~:

- means ~~(21a)~~ for a time-related process, in which for each pixel of a given frame, the value of the [[said]] frame pixel is compared with its previous frame pixel ~~correct~~ value, of said position, smoothed using a time constant ~~«time constant»~~ which is caused to evolve over the course of time to ~~maximise~~ maximize the smoothing, in order to determine two parameters significant of the time variation of the pixel value between the frames, parameters which are variable over the course of time and are represented by two digital signals, ~~i.e.~~ which include a first binary ~~signals DP~~ signal (DP signal), a first value of which represents a threshold overrun determined by the [[said]] variation and a second value of which represents the non-overrun of this threshold determined by the [[said]] variation, and a second digital ~~signals CO~~ signal (CO signal), with a limited number of bits, representing the instant value, ~~for the said pixel,~~ of the [[said]] time constant, for the frame pixel,

- means ~~(21b)~~ for a space-related process ~~of the values~~, for each pixel of a given frame, ~~of~~ on said both digital signals ~~DP~~ (DP) and ~~CO~~ (CO) to determine the moving pixels for which simultaneously the [[said]] first signals ~~DP~~ (DP signals) exhibits the [[said]] first value representing the overrun of the [[said]] threshold and the [[said]] second signals (CO signals) varies significantly between neighboring pixels, ~~where as both these processes, time related and space related,~~ and

- means ~~(21c)~~ to deduct, from the [[said]] moving pixels, the amplitude and the oriented direction of the displacement in binary signals, ~~on the one hand, the first value,~~

~~representative of a displacement, for the said second binary signals and, on the other, the digital values of said both other digital groups among the said four groups of digital signals,~~

b) means ~~(34)~~ to restore the position of the pixel if it has been displaced,

c) means ~~(39)~~ to check whether the position-restored pixel in case of displacement is in compliance or in non compliance with the corresponding pixel of the frame involved,

d) means to memorise the result of this check, and

e) means ~~(40)~~ to transfer to the [[said]] final compression assembly ~~(13/CP)~~ [C] either the [[said]] correction bits packets ~~packet of signals representative~~ in case of compliance, or the picture mosaic encoded signals (VM) type from the [[said]] preliminary encoding wavelet filter in case of non compliance; and,

as regards ~~for~~ the decompression component [DP], ~~it comprises, moreover, a~~ the preliminary decoding assembly [E], ~~whose~~ input is connected to the output of the [[said]] initial decompression assembly [D] and ~~whose~~ its output is connected to ~~the~~ a reverse wavelet filter input of the final decoding assembly [F] ~~said wavelet filter, which~~ said decoding assembly [E] comprising~~comprises~~:

a) a loop ~~(50-51-52)~~ whose input ~~(34e)~~ receives, from the [[said]] decompression assembly ~~(13/DP)~~ [D], the [[said]] reconstructed flow of binary signals (VP1), which starts with a picture mosaic type signals corresponding to a first frame of the video signals to be ~~reconstructed~~ decoded and which circulates in the form of a picture mosaic type signals, whereas the travel duration of the [[said]] signals over the [[said]] loop is equal to that of a frame of the video signals to be reconstructed, each signals of a frame circulating normally in the loop as long as no modification and no displacement is signaled in the decompressed binary signals (VP1) from the initial decompression assembly,

b) means ~~(70)~~ to reposition, in the [[said]] loop, the pixels having undergone a displacement indicated by a group of digital signals which represent, in the ~~said reconstructed~~ flow of decompressed digital signals (VP1), the amplitude and the displacement direction,

c) means ~~(203)~~ to replace the picture mosaic type signals in circulation in the loop with the new signals of this type as they arrive, and

d) means to transmit to the final decoding assembly [F]~~operation~~, from an output (35) located downstream of the said input position, the picture mosaic type signals circulating in the loop~~, after possible repositioning~~.

8. (Currently Amended) A device according to claim 7, ~~characterised in that,~~ wherein for the decompression component [DP], the [[said]] ~~preliminary~~ decoding assembly comprises [E]:

- means to cause to circulate normally, in a loop ~~(50-51-52)~~, a frame of the [[said]] decompressed binary signals (CP1) of mosaic type, ~~but encoded,~~ received from the [[said]] initial decompression ~~portion of the said compression decompression~~ assembly as long as both binary signals represent simultaneously an absence of correction and an absence of movement,

- means to replace, in the [[said]] loop, the frame in circulation, with a new frame arriving with new pixel values, in the case when the binary correction signals indicates the necessity of a correction, and

- means to perform, in a square matrix ~~(50)~~, whose odd number of lines and of columns is smaller than the number of lines and of columns of a frame, wherein ~~whereas~~ both these numbers are greater than, by at least one unit, the number of quantification levels of the said displacement amplitude, and through which circulate the [[said]] decompressed binary signals (VP1) of mosaic type, a translation operation of the moving pixels within the [[said]] matrix from their position to the center position of pixel in the said matrix, in the case when the ~~said first~~ binary correction signals indicates an absence of correction while the ~~said second~~ binary displacement signals indicates a displacement.

9. (Currently Amended) A device according to claim 7, further comprising i) ~~characterised it comprises~~ means ~~(203)~~ to cause the [[said]] digital signal encoded at the input to circulate over a loop ~~(50-51-52)~~, whose travel duration needed by the [[said]] signal is equal to the duration of a frame of this signal, ii) means to cause the [[said]] signal, during its travel over the [[said]] loop, to pass through a pixel position matrix ~~(50)~~ the number of whose rows, on the one hand, and the number of whose columns, on the other, is at least equal to 2n+1, wherein

while designating by *n* is the number of levels quantifying the displacement amplitude, wherein whereby the [[said]] signal is injected into the [[said]] loop at a central position (60) of the [[said]] matrix (50), iii) means (70) to bring back, after running the [[said]] first frame of each sequence, within the said central position (60) a pixel of the [[said]] signal, while moving inside the [[said]] matrix, which has moved between the frame involved and the previous frame, in relation to the packet of correction bits regarding the said pixel, in order thus to restore the successive frames of the sequences as they were before encoding in the encoding operation, and iv) means to extract from the said loop, in a position (35) located downstream, in the running direction, of the said central position (60), the successive frames thus restored.

10. (Currently Amended) A video compression apparatus, comprising:

- a motion analysis stage, comprising circuitry configured designed to identify a pixel of a current frame of a video whose contents correspond to a different pixel of a previous frame of the video, and designed to produce a datum coding motion between the pixel of the previous frame and the pixel of the current frame; and

- at al least one other video processing stage of circuitry and/or software interconnected with the motion analysis stage to Io effect compression of the video, said other video processing stage having:

a decoder configured to decode motion coding data produced by the motion analysis stage;

a comparator configured to compare the decoded motion generated by the decoder to a representation of an input to the motion analysis stage; and

circuitry controlled by the comparator to

suppress in the compressed video a motion coding datum and replace it with a less-encoded datum for a corresponding portion of the video.

11. (Currently Amended) The apparatus of claim 10, wherein the motion analysis stage further comprises circuitry and/or software designed to identify a pixel of the current frame whose contents corresponds to the same pixel of the previous frame. The apparatus of claim 10, wherein the corresponding content is identified when a numerical value of

the pixel of the current frame differs from the pixel of the previous frame within a threshold tolerance.

12. (Currently Amended) ~~The apparatus of claim 10, wherein the corresponding content is identified when a numerical value of the pixel of the current frame differs from the pixel of the previous frame within a threshold tolerance.~~ The apparatus of claim 10, wherein the motion analysis stage further comprises circuitry configured to identify a pixel of the current frame whose contents corresponds to the same pixel of the previous frame.

13. (Currently Amended) The apparatus of claim 12~~11~~, wherein a datum coding the pixel of the current frame whose contents corresponds to the same pixel of the previous frame is entirely zeros.

14. (Currently Amended) The apparatus of claim 10, wherein the motion analysis stage further comprises circuitry configured ~~designed~~ to convey a content of one pixel of the current frame instead of the datum coding motion of the one pixel.

15. (Original) The apparatus of claim 14, wherein the one pixel is selected because of a large change in the content of the one pixel.

16. (Original) The apparatus of claim 10, wherein the motion is encoded as a spatial displacement between the pixel of the previous frame and the pixel of the current frame.

17. (Original) The apparatus of claim 16, wherein the spatial displacement, is encoded as a direction and distance.

18. (Canceled)

19. (Currently Amended) The apparatus of claim 10~~18~~, wherein the circuitry controlled by the comparator introduces corrections in a representation of the stored motion stored in the decoder.

20. (Currently Amended) The apparatus of claim 10~~1~~8, wherein the circuitry controlled by the comparator is designed to increase a compression factor of the apparatus by introducing noise into the compression of the video.

21. (Canceled)

22. (Original) The apparatus of claim 10, further comprising:
a wavelet coder upstream of the motion analysis stage.

23. (Original) The apparatus of claim 10, further comprising a run-length coder downstream of the motion analysis stage.

24. (Original) The apparatus of claim 10, wherein the motion analysis stage analyses a luminance channel of the video.

25. (Currently Amended) The apparatus of claim 22~~2~~4, wherein chrominance channels of the video are not analysed in the motion analysis stage.

26. (Currently Amended) The apparatus of claim 22~~2~~4, wherein chrominance channels of the video are compressed based on the analysis of the luminance channel.

27. (Currently Amended) The apparatus of claim 22~~2~~4, wherein chrominance channels of the video are compressed according to an intensity change during the stage that analyses the luminance channel.

28. (Currently Amended) Apparatus for processing digitally encoded video, comprising:
one sequential buffer memory of the size of at least one frame plus 2n lines 2n+1 pixels, where n is the maximum amplitude of motion, digitally encodable in the video pixels, in said buffer memory having only one operational entry port and one operational output port;
means for delivering to said buffer memory, in a sequential mode on said single entry port, successive pixel values of successive frames of said digitally encoded video; and

one of a circuit and ~~and/or~~ software for replacing pixel values in a current video frame at least partially stored, in a sequential mode, in said buffer memory, with pixel values from a previous frame at least partially stored, in a sequential mode, in said buffer memory, in compliance with digital control data, representative of the pixel motion, encoded in said buffer memory.

29. (New) Apparatus for decoding digitally encoded video made of a succession of frames of pixels which is encoded with a video compression apparatus having at least a motion analysis stage and producing compressed video made for each pixel of either a motion coding datum or of a less-encoded datum for a corresponding portion of the video, wherein the decoding apparatus has a preliminary decoding assembly comprising:

a) a loop in the form of a sequential buffer memory of the size of at least one frame plus 2n lines plus 2n+1 pixels, where n is the maximum amplitude of motion, and whose input receives with less-encoded datum a first frame of the video signals to be decoded and which circulates in the loop, wherein the travel duration of the signals over the loop is equal to that of a frame of the video signals to be reconstructed,

b) means for repositioning, in the loop, the pixels having undergone a displacement indicated in the motion coding datum by a group of digital signals which represent an amplitude and a displacement direction,

c) means for replacing less-encoded datum in circulation in the loop with the new signals of this type as they arrive, and

d) means for outputting, from an output located downstream of the input position, the decoded video.

30. (New) Apparatus for decoding digitally encoded video made of a succession of frames of pixels which is encoded with a video compression apparatus having at least a motion analysis stage and producing compressed video made for each pixel of either a motion coding datum or of a mosaic type datum for a corresponding portion of the video, said video compression apparatus further comprising a wavelet coder producing picture mosaic type

signals upstream of the motion analysis stage, wherein the decoding apparatus has a preliminary decoding assembly comprising:

a) a loop in the form of a sequential buffer memory of the size of at least one frame plus 2n lines plus 2n+1 pixels, where n is the maximum amplitude of motion, and whose input receives picture mosaic type signals corresponding to a first frame of the video signals to be decoded and which circulates in the form of a picture mosaic type signals, wherein the travel duration of the signals over the loop is equal to that of a frame of the video signals to be reconstructed,

b) means for repositioning, in the said loop, the pixels having undergone a displacement indicated in the motion coding datum by a group of digital signals which represent an amplitude and a displacement direction,

c) means for replacing the picture mosaic type signals in circulation in the loop with the new signals of this type as they arrive, and

d) means for transmitting to a final decoding module having a reverse wavelet filter, from an output located downstream of the said input position, the picture mosaic type signals circulating in the loop.

31. (New) The apparatus of claim 10, wherein the at least one other video processing stage is implemented in one of circuitry, software, and both circuitry and software.